

Instructor: Amanda Lien

Office: S75b

Office Hours: Monday and Wednesday, in-person 8:30-9:20am – **Please note: Face masks required**

Tuesday and Thursday, on Zoom 1:00-1:50pm – <https://fhda-edu.zoom.us/j/84961071513>

Email: lienamanda@fhda.edu

MATH 10: Introductory Statistics • Sec 70Z • Winter 2023

Asynchronous Learning on Canvas

COURSE DESCRIPTION

Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, social sciences, psychology, the sciences, and those pertaining to issues of contemporary interest. The use of technology (graphing calculators) will be required in certain applications. Where appropriate, the contributions to the development of statistics by men and women from diverse cultures will be introduced. (5 units)

PREREQUISITE

Intermediate Algebra (Math 109, Math 114, or Math 130) or equivalent.

Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

REQUIRED MATERIALS

- Laptop/computer with working and reliable Internet
- WebAssign access code
- Scanner or camera (can be your phone's camera) to take pictures of your work
- Graphing calculator (TI-83/TI-83 Plus/TI-84/TI-84 Plus)
- Paper, pencils, erasers, colored pens, ruler/straight-edge
- Lecture notes printed/downloaded to use with each video lecture

E-BOOK (AVAILABLE WITH WEBASSIGN HOMEWORK)

- *Introductory Statistics* by Barbara Illowsky and Susan Dean, ISBN: 978-1-938168-20-8
NOTE: This textbook is available to download for free (online or PDF) on:
<http://openstaxcollege.org/textbooks/introductory-statistics/>

STUDENT LEARNING OUTCOMES

Students successfully completing this course will be able to:

- Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.
- Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.
- Collect data, interpret, compose and evaluate conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

IMPORTANT DATES*

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|------------------------------|--|
| Wednesday, January 11 | Practice Homework & Quiz due at 11:00pm |
| Friday, January 13 | Quiz #1 due at 11:00pm |
| Sunday, January 15 | Introductions Discussion Posts due at 11:00pm |
| Monday, January 16 | MLK Jr. Holiday (no office hours) |
| Friday, January 20 | Quiz #2 due at 11:00pm |
| Saturday, January 21 | Last day to add quarter-length classes |
| Sunday, January 22 | Last day to drop with no record of grade |
| Friday, January 27 | Midterm #1 due at 11:00pm |
| Friday, February 3 | Quiz #3 due at 11:00pm Last day to request pass/no pass grade |
| Friday, February 10 | Quiz #4 due at 11:00pm |
| Thursday, February 16 | Midterm #2 due at 11:00pm |
| Friday, February 17 | President's Holiday (no office hours) |
| Monday, February 20 | President's Holiday (no office hours) |
| Friday, February 24 | Quiz #5 due at 11:00pm |
| Friday, March 3 | Quiz #6 due at 11:00pm Last day to drop with a "W" |
| Friday, March 10 | Midterm #3 due at 11:00pm |
| Friday, March 17 | Quiz #7 due at 11:00pm |
| Friday, March 24 | Quiz #8 due at 11:00pm |
| Sunday, March 26 | Extra Credit due at 11:00pm (optional) |
| Wednesday, March 29 | Final Exam due at 11:00pm |

* The instructor reserves the right to adjust any due dates and times for quizzes and exams. Any changes will clearly be communicated well in advance via email.

* Please see the detailed calendar at the end of this syllabus for a better idea of what to expect each week.

* All times listed on this syllabus are in **Pacific Standard Time**. Please convert the times accordingly if you are located in a different time zone.

How will we learn math online?

This course will rely heavily on the use of Canvas (<https://deanza.instructure.com/>). We will be learning fully online or *asynchronously*, meaning that at your own pace, you will watch video lectures, complete homework assignments, and take either a quiz or an exam **every week** this quarter. There will be set due dates for all of the homework assignments, quizzes, and exams. This 5-unit math course will take you approximately 10-15 hours per week to complete. If you know right now that you will not be able to commit to these hours, you may want to consider taking this class another time. Make-up quizzes/exams will not be offered.

I will pre-record the lessons on Zoom for each week and post the links on Canvas. Although you will be able to watch the videos at your own time and pace, you are expected to complete them in a timely manner so that you are ready to take the quiz/midterm and submit them by Friday at 11:00pm of that week (with the exception of the second midterm due to the President's Holiday). It is very easy to fall behind in an online class, so you are encouraged to set aside at least 2 hours each day to dedicate to this class as opposed to doing several hours of work in one day.

How do I access my homework assignments?

Homework will be assigned through WebAssign. You will access each homework assignment by clicking on the links on Canvas. You are permitted five (5) submissions for each problem. If you use up all five submissions, I am not able to grant extra submissions. WebAssign will mark each problem as correct (green check mark) or incorrect (red x). If you are on your third attempt and your answer is still incorrect, you should reach out to me as soon as possible to ask for help. You could also post questions in the discussion boards.

The homework will be based on the sections that I cover in the videos for each week. You should watch the videos before starting the homework as I may offer hints and tips. The links for the homework will be

available to you starting Sunday of each week at 7:30am and are due the following week on Wednesday at 11pm. This gives you plenty of time (about eleven days) to work on each week's homework assignments and to ask any questions. Please note that although you are given eleven days to submit the assignments, you should not wait until the last minute to start them. In fact, it would be better if you can get most of them done by the end of the week so that you will have practiced similar problems that may appear on your weekly quiz. Please pay careful attention to due dates. I will not accept late work for any reason and am not able to grant extensions.

You can still access the homework assignments after the due date as well as view the answer key. To access previous homework assignments, you will need to click on the link for that assignment on Canvas. While you are not able to change your score after the due date, you can practice working on these problems to prepare for quizzes and exams.

WebAssign offers a 5-month access plan that costs \$41.95 directly from their site. Since our class runs for 12 weeks (3 months), you should purchase the \$41.95 option. You will be able to use WebAssign's trial period for free during the first two weeks of the quarter. After two weeks, you are required to purchase access so that you may continue to do the homework online. I will not be able to accept any other form of homework, so please make sure that you are able to use WebAssign if you plan to stay enrolled in this course.

How will I ask you questions if I need clarification on the homework and/or video lectures?

There are three ways for you to reach me: office hours, email, and Canvas Discussion board

1. I will be available in my office S75b (located in the [S7 building](#), on the side facing the streets) for **in-person office hours** on Mondays and Wednesdays from 8:30-9:20am. Please note that face masks are required at all times in this office space. For health safety reasons, I will not be able to admit students into in-person office hours without a face mask.

I will be available for **online office hours** each week on Tuesdays and Thursdays from 1:00-1:50pm. Use this link during that time frame to chat with me: <https://fhda-edu.zoom.us/j/84961071513>

I have chosen to enable the use of "waiting rooms" in Zoom office hours so that each student may privately speak to me during office hours. If you see that you are in the waiting room, please wait for me and I will be with you as soon as I am done helping the previous student(s). You are not expected to use your webcam during office hours, but it is helpful if you can use the microphone feature to talk to me. Zoom also offers a chat feature where you can type your questions to me, though I prefer that you talk to me using the microphone during office hours.

If my office hour does not work for your schedule because you have a synchronous class happening at that same time, you may request an appointment for a different time to meet with me online OR you may use the other two options below to communicate with me.

2. I check my email regularly. You are welcome to send me an email with any questions, comments, or concerns. My email is lienamanda@fhda.edu. On Monday through Thursday, you can expect to get a response from me within 24-48 hours. I may not check my email on the weekends. Please note that if you are emailing me about a *specific* homework question or clarification question about the video lectures, I may request that you post that question on Canvas Discussion (see below), especially if I think your question will benefit the learning of your fellow classmates. In that case, you will post your question on the Discussion board on Canvas, and I will answer your question there. That way, other students in the class who may have had a similar question can view the response and even add follow-up questions.

3. Since the class will be asynchronous, I wanted a way for us all to be able to chat and check in with each other as needed during the quarter. The best way to stay connected online will be with the use of the Discussion board on Canvas. Please try to use the Discussion board to ask me homework questions outside of office hours. If you email me, it is likely that I may ask you to post on the Discussion board anyway.

I ask that we practice proper online posing etiquette when using the Discussion board:

- **Be respectful to each other.** We want this to be a positive and safe learning environment where students can comfortably have a discussion and ask questions without feeling judged. We are all learning together, and these discussions serve as another form of support.
- **Be specific.** If you have a question regarding a problem from WebAssign, please specify the problem number as well as the chapter it is from so that we can find it. Please also copy and paste the problem directly into the discussion (or take a screenshot and add it there). Mention any methods or techniques you may have tried on this problem before you got stuck. If you have a question about something from the video lectures, please specify which video and give a rough time stamp.
- **Check to see if anyone asked a similar question before posting a new thread.** You can add follow-up questions to a preexisting thread that someone may have already started. Just click "Reply". This will keep our discussions more organized.

Here's a good example of how you can post your questions on Canvas Discussion:

First, please locate the correct discussion thread by determining what Week # your question is from. You can also find the specific discussion board within each weekly module. This way, we can try to keep our threads organized and easier to navigate.

Hi everyone, I have a question about the Section 2.3 homework on problem #8. Here is a screenshot of my problem:

8. 0/0.83 points

Evaluate the limit, if it exists. (If an answer does not exist, enter DNE.)

$$\lim_{h \rightarrow 0} \frac{\sqrt{81+h}-9}{h}$$

I tried following the video lecture from Section 2.3 and I multiplied by the conjugate of the numerator $\sqrt{81+h}+9$ but I'm not sure what I should do next. Could I get some help please? Thanks!

55 words

Cancel Post Reply

I am encouraging everyone to check the Discussion boards regularly. If a fellow classmate posts a question that you can answer, please do so by clicking on "Reply" on the bottom right corner of their post. I strongly believe that if you are able to explain a concept to someone else, it means that you

understand the material yourself. Don't worry about making mistakes when asking or answering questions. **Mistakes are good for the learning experience.** I want us to make mistakes so that we can learn from them. If no one responds to your question after 24 hours, I will respond. For that reason, you should not wait until the day before homework is due to post questions. Post them early in the week to give everyone (myself included) enough time to answer them.

I *may* consider awarding extra credit points to students who regularly post quality questions and/or answers on the Discussion board. This will be decided based on how the Discussion board plays out during the quarter.

When and how will we take the quizzes? What will be covered on the quizzes?

We will take a total of eight quizzes this quarter that will be available to you on Sunday at 7:30am and due on that Friday at 11:00pm of each week unless a midterm exam is scheduled for that week. The quizzes will be taken on Canvas and can be found in that week's Module. Each quiz will consist of 10 multiple choice questions, worth 1 point each. You will not be asked to submit work, but you are strongly encouraged to have scratch paper and pencil nearby in case you need to work out the problem before selecting the answer.

The quiz will include questions based on topics that were covered during that particular week and/or the previous week. This is, again, why it is very important that you stay on track and keep up with the weekly video lectures. You are permitted to use your graphing calculator and lecture notes during the quiz. Each quiz is designed to take anywhere from 15-30 minutes to complete it. You will be given 60 minutes to complete the quiz and the clock will start counting down as soon as you click on the "Take the Quiz" button. Please make sure that you are ready before clicking on the link. Be sure to click "Submit Quiz" at the end. After 60 minutes, the quiz will automatically be submitted on Canvas.

To ensure that you have the full 60 minutes to work on the quiz, you should start the quiz no later than 10:00pm on Friday (though it is encouraged that you start much earlier in the week since the quiz will be available to you on Sunday at 7:30am). The quiz will close at 11:00pm on Friday and become inaccessible. No make-up quizzes will be given for any reason.

To get an idea of how quizzes will be taken on Canvas, there will be a practice quiz for you to try in the Orientation Module during Week 1 of the quarter.

When and how will we take the exams? What will be covered on the exams?

There are a total of three midterms and one final exam this quarter. The midterms will be taken in Weeks 3, 6, and 9 and the final exam will be taken during Finals Week.

Just like the quizzes, the midterms will be taken on Canvas and can be found in that week's Module. Each midterm will consist of 25 multiple choice questions, worth 2 point each. You will not be asked to submit work, but you are strongly encouraged to have scratch paper and pencil nearby in case you need to work out the problem before selecting the answer.

The midterms will be based on the previous weeks' material. That is, Midterm #1 in Week 3 will be based on the material from Weeks 1-2 and partially Week 3. Midterm #2 in Week 6 will be based on the material from Weeks 3, 4, and 5. And Midterm #3 in Week 9 will be based on the material from Weeks 6, 7, and 8. The final exam will be cumulative, covering the material from Weeks 1-11. (See calendar at end of syllabus for specific pages of lecture notes.)

Also like the quizzes, the midterms will be available to you on Sunday at 7:30am and due on Friday at 11:00pm of that same week (with the exception of Midterm #2 that will be due on Thursday at 11:00pm since the President's Holiday falls on a Friday). See the detailed calendar at end of syllabus. You will have 120

minutes to complete the midterm and the clock will start counting down as soon as you click on the “Take the Quiz” button. Please make sure that you are ready before clicking on the link. Be sure to click “Submit Quiz” at the end. After 120 minutes, the midterm will automatically be submitted on Canvas.

The final exam will be available on Sunday at 7:30am on Finals Week and due by Wednesday at 11:00pm that same week. You will have 120 minutes to complete the final and the clock will start counting down as soon as you click on the “Take the Quiz” button. Please make sure that you are ready before clicking on the link. Be sure to click “Submit Quiz” at the end. After 120 minutes, the final exam will automatically be submitted on Canvas.

What happens if I miss a quiz or a midterm? What happens if I miss a homework assignment?

There are absolutely no make-up quizzes, midterms, or homework this quarter for any reason. Please do not ask me for them as my answer will always be “no.” I am choosing to hold strict/firm deadlines in hopes that it will help keep the class on track. You should start planning ahead now to set aside time for these quiz/midterm dates and homework due dates. The due dates for the homework, quizzes, and midterms are on the last page of this syllabus and they will also be listed clearly on Canvas.

I understand that life happens and sometimes we get sick, oversleep, have appointments, forget, etc. To help with this, I am dropping one (1) of your lowest quiz scores and one (1) of your lowest homework scores. I will also replace your lowest midterm score with your final exam score, if it is higher. You can learn more about this in the grading policy/procedure below.

What is the grading policy and procedure?

- There will be three midterms and a final this quarter, all taken on Canvas.
- If your final exam score is higher than any of your midterm scores, the final exam score (excluding any extra credit points) will be used to replace the lowest midterm score. If the lowest midterm score is a result of cheating, it will not be considered for the replacement.
- Your one (1) lowest WebAssign homework score will be dropped. However, I still encourage you to do all assignments in order to get the most out of this course. Remember that practice is key!
- Your one (1) lowest quiz score will be dropped.
- The grades for the exams will be changed only if there is a clear error on my part, such as adding up marks incorrectly or if Canvas graded something incorrectly. Problems must be brought to my attention immediately.
- An incomplete grade (I) is rarely assigned. It will only be assigned in extreme situations (i.e. unforeseeable emergency and justifiable reason at the end of the term that prevent you from completing the course). You must be in good standing with near-perfect attendance/participation and an overall grade of a 70% (C) or greater in order to request for an incomplete grade.

| Breakdown of grades: | |
|-----------------------------|-----|
| Homework | 20% |
| Quizzes | 20% |
| Midterm 1 | 15% |
| Midterm 2 | 15% |
| Midterm 3 | 15% |
| Final Exam | 15% |

| Quarter grade: | | | |
|-----------------------|-----------|----------|-----------|
| ≥ 100% | A+ | 78-79.9% | C+ |
| 93-99.9% | A | 70-77.9% | C |
| 90-92.9% | A- | 68-69.9% | D+ |
| 88-89.9% | B+ | 63-67.9% | D |
| 83-87.9% | B | 60-62.9% | D- |
| 80-82.9% | B- | 0-59.9% | F |

Final grades are non-negotiable. You should monitor your scores in the Canvas Gradebook regularly throughout the quarter. If there are any discrepancies, they should be brought to my attention as soon as possible.

ACADEMIC DISHONESTY

By enrolling in this class, you agree to uphold the standards of academic integrity as outlined in the current De Anza college catalogue. Dishonesty includes but is not limited to having someone other than yourself take the course, plagiarizing, knowingly assisting another student in cheating or plagiarism, or knowingly furnishing false information to college staff, faculty, administrators or other officials. **If you are observed cheating, you may receive an F on the assignment/exam and be dismissed from the course. Furthermore, the incident will be reported to the Dean of Student Development for review and a note will be made in your school records. Please do not give me any reason to suspect cheating.**

CODE OF STUDENT CONDUCT

The college has an obligation to specify those standards of behavior essential to its educational mission and campus life. The students who are in violation of the Code of Student Conduct are subject to disciplinary sanctions which apply at all times on campus as well as to any off-campus functions sponsored or supervised by the college.

ACCESSIBILITY ACCOMODATIONS

If you have a documented disability and wish to discuss academic accommodations, or if you would need assistance in the event of an emergency evacuation, please inform me as soon as possible.

MASK POLICY

Face masks are required at all times in my office this quarter for everyone's health and safety. I sincerely appreciate your support in helping keep our community safe.

LAST NOTE

Please remember that you are accountable for your education. This means that if you are having trouble understanding a concept presented in the videos, I encourage you to ask questions in office hours, on Canvas Discussion, or you can just email me. I am here for you and want you to be successful in this course. Do not wait until the end of the quarter to realize that you need help. Math is a hierarchical subject – it continues to build up on knowledge from previous material, so it would be to your advantage to stay on track with each week's material.

By enrolling in this course, you are agreeing to all of the policies and procedures as outlined in this syllabus.

| | Sun | Mon | Tue | Wed | Thur | Fri |
|--|---|---|-----|--|--|---|
| Week 1: Orientation Chapter 1 | Practice Homework & Quiz available at 7:30am Introductions Discussion available at 7:30am Quiz #1 available at 7:30am Chapter 1 homework available at 7:30am (Ch 1 problems #1-12) | | | Practice Homework due on WebAssign at 11pm Practice Quiz on due on Canvas at 11pm | | Quiz #1 due on Canvas at 11pm Coverage: Ch 1, p.1-14 of notes |
| Week 2: Chapters 1 and 2 | Quiz #2 available at 7:30am Continue Chapter 1 homework (Ch 1 problems #13-16) Chapter 2 homework available at 7:30am (Ch 2 problems #1-6) Introductions Discussion initial and reply posts due at 11:00pm | Martin Luther King Jr. Holiday (no class, no office hours) | | | | Quiz #2 due on Canvas at 11pm Coverage: Ch 1-2, p.15-30 of notes |
| Week 3: Chapter 2 | Midterm #1 available at 7:30am Continue Chapter 2 homework (Ch 2 problems #7-18) | | | Chapter 1 homework due on WebAssign at 11pm | | Midterm #1 due on Canvas at 11pm Coverage: Ch 1-2, p.1-32 of notes |
| Week 4: Chapter 3 | Quiz #3 available at 7:30am Chapter 3 homework available at 7:30am (Ch 3 problems #1-20) | | | Chapter 2 homework due on WebAssign at 11pm | | Quiz #3 due on Canvas at 11pm Coverage: Ch 2-3, p.33-63 of notes |
| Week 5: Chapter 4 | Quiz #4 available at 7:30am Chapter 4 homework available at 7:30am (Ch 4 problems #1-16) | | | Chapter 3 homework due on WebAssign at 11pm | | Quiz #4 due on Canvas at 11pm Coverage: Ch 4, p.64-75 of notes |
| Week 6: Chapters 5 and 6 | Midterm #2 available at 7:30am Chapters 5-6 homework available at 7:30am (Ch 5 problems #1-10, Ch 6 problems #1-12) | | | Chapter 4 homework due on WebAssign at 11pm | Midterm #2 due on Canvas at 11pm Coverage: Ch 2-4, p.33-75 of notes | President's Holiday (no class, no office hours) |

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| Week 7: Chapters 7 and 8 | Quiz #5 available at 7:30am Chapters 7-8 homework available at 7:30am (Ch 7 problems #1-10, Ch 8 problems #1-6, except 3c and 5e(iii) – we will cover error bounds next week) | President's Holiday (no class, no office hours) | | Chapters 5-6 homework <u>due</u> on WebAssign at 11pm | | Quiz #5 <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 5-8, p.76-100 of notes |
| Week 8: Chapters 8 and 9 | Quiz #6 available at 7:30am Continue Chapter 8 homework (Ch 8 problems # 3c, 5e(iii), 7-14) Chapter 9 homework available at 7:30am (Ch 9 problems #1-10) | | | Chapter 7 homework <u>due</u> on WebAssign at 11pm | | Quiz #6 <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 8-9, p.101-117 of notes |
| Week 9: Chapters 10 and 11 Extra Credit | Midterm #3 available at 7:30am Chapters 10-11 homework available at 7:30am (Ch 10 problems #1-5, Ch 11 problems #1-5) Extra Credit available at 7:30am | | | Chapters 8-9 homework <u>due</u> on WebAssign at 11pm | | Midterm #3 <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 5-9, p.76-117 of notes |
| Week 10: Chapter 12 | Quiz #7 available at 7:30am Chapter 12 homework available at 7:30am (Ch 12 problems #1-9) | | | Chapters 10-11 homework <u>due</u> on WebAssign at 11pm | | Quiz #7 <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 10-12, p.118-141 of notes |
| Week 11: Chapter 13 | Quiz #8 available at 7:30am Chapter 13 homework available at 7:30am (Ch 13 problems #1-9) | | | Chapter 12 homework <u>due</u> on WebAssign at 11pm | | Quiz #8 <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 13, p.142-146 of notes |
| Finals Week | Final Exam available at 7:30am Extra Credit <u>due</u> at 11pm | | | Chapter 13 homework <u>due</u> on WebAssign at 11pm Final Exam <u>due</u> on Canvas at 11pm <u>Coverage:</u> Ch 1-13, p.1-146 of notes | | |

Student Learning Outcome(s):

*Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data.

*Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.

*Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.

Office Hours:

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|------|----------|----------|-----------|------|
| M,W | 08:30 AM | 09:20 AM | In-Person | S75b |
| T,TH | 01:00 PM | 01:50 PM | Zoom | |